

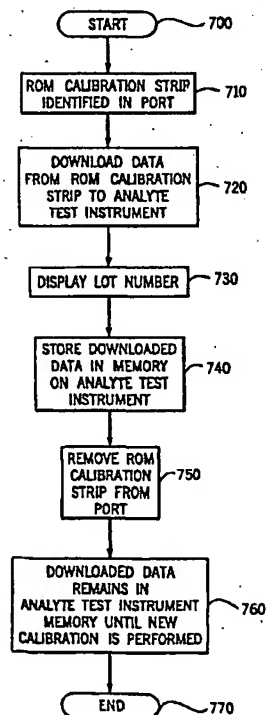


INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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| (51) International Patent Classification 7 : G01N 33/487, G05B 19/12, G06K 19/07, G07C 3/04, 1/00 | A3 | (11) International Publication Number: WO 00/33072 (43) International Publication Date: 8 June 2000 (08.06.00) |
| (21) International Application Number: PCT/US99/27312 (22) International Filing Date: 17 November 1999 (17.11.99) (30) Priority Data: 60/110,227 30 November 1998 (30.11.98) US (71) Applicant: ABBOTT LABORATORIES [US/US]; CHAD 0377/AP6D-2, 100 Abbott Park Road, Abbott Park, IL 60064-6050 (US). (72) Inventors: DEWEESE, Marshall, D.; 32 Duxbury Road, Newton, MA 02459 (US). CARAYANNOPOULOS, Leonidas; Apartment 2, 929 Broadway, Somerville, MA 02144 (US). PARKS, Joel, M.; 13 Ledgewood Drive, Bedford, MA 01730 (US). AMES, William, H.; 141 Lovell Road, Holden, MA 01520 (US). (74) Agents: WEINSTEIN, David, L. et al.; Abbott Laboratories, CHAD 0377/AP6D-2, 100 Abbott Park Road, Abbott Park, IL 60064-6050 (US). | | (81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> (88) Date of publication of the international search report: 23 November 2000 (23.11.00) |

(54) Title: ANALYTE TEST INSTRUMENT HAVING IMPROVED CALIBRATION AND COMMUNICATION PROCESSES**(57) Abstract**

An analyte test instrument having improved calibration and communication processes. The instrument employs a calibration method that allows it to communicate with any one of a plurality of data storage strips. A data storage strip including a memory device is inserted into the test port of the instrument. The data storage strip is identified, and the instrument establishes communications with the data storage strip using a protocol corresponding to the data storage strip. Second, the instrument employs a method for ensuring that the instrument is operated using valid calibration strips and test strips. The instrument determines whether one or more of test parameters stored in the instrument is invalid for a test strip inserted into the test port of the instrument. If a test parameter is invalid, an indication of the invalid strip parameter is displayed on the display. Finally, the instrument utilizes a method for determining the actual date and time of events that occurred before the instrument was provided with current date and time.



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INTERNATIONAL SEARCH REPORT

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| A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G01N33/487 G05B19/12 G06K19/07 G07C3/04 G07C1/00 | | Inter national Application No PCT/US 99/27312 |
| According to International Patent Classification (IPC) or to both national classification and IPC | | |
| B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 7 G01N G05B G06K G07C | | |
| Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched | | |
| Electronic data base consulted during the international search (name of data base and, where practical, search terms used) | | |
| C. DOCUMENTS CONSIDERED TO BE RELEVANT | | |
| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
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| Y | page 16, line 11 -page 17, line 6 page 21, line 3 - line 5 page 26, line 8 - line 13 page 38, line 1 - line 22 page 39, line 12 - line 22 | 10-15 |
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| -/-- | | |
| <input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input type="checkbox"/> Patent family members are listed in annex. | | |
| * Special categories of cited documents : <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> </div> <div style="width: 45%;"> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>"&" document member of the same patent family</p> </div> </div> | | |
| Date of the actual completion of the international search <div style="text-align: center; font-weight: bold;">16 June 2000</div> | | Date of mailing of the international search report <div style="text-align: center; font-weight: bold;">23.06.00</div> |
| Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016 | | Authorized officer <div style="text-align: center; font-weight: bold;">Hocquet, A</div> |

INTERNATIONAL SEARCH REPORT

International Application No

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| C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT | | |
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INTERNATIONAL SEARCH REPORT

International application No.
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Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-17,23-25

Methods for using an analyte test instrument having a test port receiving test strips or data storage strips.

2. Claims: 18-22

Method for determining date and time in an analyte test instrument

INTERNATIONAL SEARCH REPORT

information on patent family members

International Application No

PCT/US 99/27312

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